Annual Drinking Water Quality Report for 2008

TOWN OF ST. Michaels

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PWSID 0200006

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is two active wells which draw from an underground source known as the Aquia Aquifer. The depth of our wells are approximately 465 feet. The earth between the surface and this underground aquifer helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into our water distribution system.

This report shows our water quality and what it means.

We have a source water protection plan available from our office that provides more information such as potential sources of contamination. This plan is also available through the Talbot County Public Library and from Maryland Department of the Environment (MDE).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact Jeff Richardson at (410) 745-9535. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Mayor and Council meetings which are held on the second Wednesday of each month beginning at 1:00 p.m. at City Hall.

The Town of St. Michaels routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2008, or as otherwise indicated. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants						
Beta/photon emitters Well # 3 (2007)	N	3.0	pCi/1	0	50	Decay of natural and man-made deposits
Alpha emitters Well # 3 (2007)	N	11.0	pCi/1	0	15	Erosion of natural deposits
Inorganic Contaminants						
Arsenic (quarterly) Well # 2 (average) Well # 3 (average)	N N	< 3 < 1	ppb	n/a	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Copper (Distribution) (2007)	N	0.59	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (Distribution) (2007)	N	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride Well #2 Well #3	N N	0.35 0.25	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) Well # 2 Well # 3	N N	< 1.0 < 1.0	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides						
Di(2-ethylhexyl) phthalate Well # 2 (2004) Well # 3 (2004)	N N	0.40 0.30	ppb	0	6	Discharge from rubber and chemical factories
Volatile Organic Contaminants						
TTHM (Distribution)(2007) [Total trihalomethanes]	N	3.32	ppb	0	80	By-product of drinking water chlorination
HAA5 [Haloacetic Acids] (Distribution) (2007)	N	ND	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants						
Sodium Well # 2 Well # 3	N N	77 76	ppm	n/a	n/a	Erosion of natural deposits
Chloroform Well # 2 Well # 3	N N	1.4 ND	ppb	n/a	n/a	By-product of drinking water chlorination

Note: Test results are for year 2008 unless noted otherwise; testing for all contaminants is not required annually.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Construction of arsenic removal systems were completed in late 2007 as reported in last annual water report, and units were placed in operation in early 2008. Arsenic levels were monitored biweekly during 2008. Test results indicated effective removal of the arsenic contaminant with most lab detects of less than 1 part per billion. Quarterly monitoring for arsenic continues as required by Federal and State Regulations.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of St. Michaels is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

NOTE: As can be seen by results listed in the above tables, lead, which is tested for triennial (every 3 years) in accordance with Federal and State Regulations in St. Michaels's distribution system, was not detected in our most recently collected samples.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.